Remarks

Claims 1-13 and 15-30 are currently pending and stand rejected. Claim 14 has previously been cancelled. Claim 1 has been amended. Applicants assert that the claims are now in condition for allowance as set forth more fully below.

Interview Summary

A telephone interview was conducted on May 30, 2006. During the interview it was discussed that the Business Rules Subsystem of Beach discloses a rules database containing predefined business rules (i.e. whole equations) which then acts upon a separate "standard" database containing processed raw data. It was pointed out that neither Beach nor any of the other references disclosed a set of mathematical equations within a database where each equation is stored as a set of sequential steps within a dimension of the database where each step of the dimension is associated with a single variable or single mathematical operator that is used in conjunction with variables and mathematical operators of previous steps to generate the equation. Beach discloses a set of complete functions and not functions separated out into separates steps in a database dimension. It was suggested that the claims further clarify that each mathematical operator and variable of the equation is stored separately, one operator or variable per step.

Further it was discussed that the sending of a key for a simple encryption and decryption process between the remote and the host disclosed by Garrison would not solve the problem addressed by the claim language which is to allow the remote to send data to the host in the final desired format. Encrypting data in an undesired format and decrypting the same data at the host still results in the host receiving data in the same undesired format. The examiner acknowledged the difference.

103 Rejections

Claim 1 stands rejected under 35 USC §103(a) as being unpatentable over Williams (US Pat 5,692,157) in view of Garrison (US Pat App 2001/0011349) and further in view of Beach (US Pat 5,924,077). Claims 2-4 and 6-9 stand rejected under 35 USC §103(a) as being unpatentable over Williams in view of Garrison and further in

view of Beach and Keyser (US Pat 5,025,373). Claims 10 and 19-20 stand rejected under 35 USC §103(a) as being unpatentable over Williams in view of Garrison. Claims 11-13, 15-17 and 23 stand rejected under 35 USC §103(a) as being unpatentable over Williams in view of Garrison and further in view of Keyser. Claim 5 is rejected as being unpatentable over Williams in view of Garrison, Beach and further in view of Schaefer (US Pat 5,826,268). Claim 18 is rejected as being unpatentable over Williams in view of Garrison and Keyser and further in view of Schaefer. Claims 21 and 22 stand rejected under 35 USC 103(a) as being unpatentable over Williams in view of Garrison and further in view of Hamala (US Pat 5,345,586). Claims 25 and 26 stand rejected under 35 USC 103(a) as being unpatentable over Williams in view of Garrison and further in view of Spencer (US Pat 6,356,909). Claims 27-30 stand rejected under 35 USC §103(a) as being unpatentable over Lipner (US Pat 5,553,304) in view of Williams and Garrison. Applicants respectfully traverse these rejections.

Claim 1

In rejecting amended independent claim 1, the Office Action asserts that Williams discloses most of the elements but concedes that Williams fails to disclose a single permissible formatting standard rule used for data transfers of that type that is automatically sent to the remote office before sending data. At the bottom of page 4, the Office Action also concedes that Williams fails to disclose a set of mathematical equations within a database where each equation is stored as a set of sequential steps within a dimension of a database.

The Office Action proceeds in its rejection by asserting that the combination of Beach and Garrison cure both of the above deficiencies of Williams. However, Applicants point out that there appears to be no explicit or implicit motivation or suggestion in any of Williams, Garrison or Beach for a combination of these references. In fact, as will be discussed below, each of Garrison and Beach appears to teach away from the claimed recitations thereby negating motivation for any such combination.

The Office Action first asserts that Beach teaches a set of mathematical equations within a database where each equation is stored as set of sequential steps within a dimension of the database. However, amended independent claim 1 recites elements that are not disclosed by Beach nor any combination beach, Williams or Garrison. Amended claim 1 recites, in pertinent part,

"[a] system for managing a set of access rules, comprising…a set of mathematical equations within a database where each equation is stored as a set of sequential steps within a dimension of the database where each step of the dimension is associated with one of a single variable and a single mathematical operator that is used in conjunction with variables and mathematical operators of previous steps to generate the equation… wherein the formatting standard rule for the data transfer of that type is automatically sent to the remote office by the main office in response to the initiation of contact by the remote office and before the remote office transmits the data to the main office such that the data is first automatically correctly formatted to be compatible with the single permissible format used by the main office for the data transfer of that type.".

Such recitations are contrary to the Office Action's cited subject matter in Beach. Beach teaches that its execution database **206** contains a library of predefined business rules *implemented as complete mathematical/relational functions*. Each Beach function is identified and executed as a *stand alone function*. (Col. 12, l. 30-36). Further, the functions in the execution database are demonstrated in Beach to be *complete functions* modeling a complete business function. (Col. 13, l. 45-56). In other words, a Beach function is a complete equation and which is not disclosed by Beach to be stored as a set of sequential steps within a dimension of a database where each step of the dimension is associated with one of a single variable and a single mathematical operator that is used in conjunction with variables and mathematical operators of previous steps to generate the equation. There is no equation to generate in Beach because a Beach equation is stored as a complete equation (Fig. 12, **206**) and is not stored as a set of sequential steps within a dimension of a database where each step of the dimension is associated with one of a single variable and a single mathematical operator that is used in conjunction with variables and mathematical operators of previous steps to generate the equation. For example in Fig. 12 of Beach, the column headed "BSR_FUNC" (Business Rule Function) depicts function "FCNTL_A1()" as a complete function residing in a single element of the table and not as a set of sequential steps within a dimension of a database where each step of the dimension is associated with one of a single variable and a single

mathematical operator that is used in conjunction with variables and mathematical operators of previous steps to generate the equation.

In paragraph 8 of the Office Acton, the examiner argues in what appears as official notice that globally "[e]very function is a series of sequential steps for the transformation of input data. Because this [Beach] function is stored on a computer readable medium, it is thus a stored series of sequential steps." If this is Official Notice, Applicants traverse the official notice and point out that such an assertion requires a significant leap by concluding that because an equation is stored on an electronic media it must be stored as a set of sequential steps in a dimension of a database. Such an assertion is an unwarranted generalization unless a written reference can be provided substantiating such a generalization. If official notice is being asserted, Applicants make demand for such a reference

Since Beach can not be shown to disclose equations stored as a set of sequential steps within a dimension of a database where each step of the dimension is associated with one of a single variable and a single mathematical operator that is used in conjunction with variables and mathematical operators of previous steps to generate the equation, Beach fails to disclose the subject matter asserted to it. Applicants assert that neither Williams nor Garrison are concerned with the issue.

Further, Beach actually appears to teach away from the claim recitations in that the functions in Beach expressly require the stored business rules to be *complete equations* (Col. 13, l. 45-56) representing a business function and not a set of sequential steps within a dimension of the database where each step of the dimension is associated with one of a single variable and a single mathematical operator that is used in conjunction with variables and mathematical operators of previous steps to generate the equation.

As to the Garrison reference, the Office Action asserts that Garrison cures the other conceded deficiency of Williams by disclosing a single permissible formatting standard rule used for data transfers of that type that is automatically sent to a remote office before sending data. However, Applicants respectfully point out that Garrison merely teaches the use of an encryption key that is *specific to a particular data session* that is automatically sent to a remote office for that data session only requiring the

encryption code to change with each session. (Abstract, Para. 0013-0014 and 0061-0065). Such an encryption key is not a *single* permissible formatting standard rule because it changes for every user session.

An encryption key is designed to encrypt a set of formatted data at one end of a transmission and decrypt the same data at the other end of the transmission thus preserving the data in the same format in which it was sent. If a Garrison encryption key was automatically sent to the remote office to encrypt data before sending, the data would necessarily be decrypted by the same session specific key upon receipt in order for the transmitted data to be in a single permissible format used by the main office. It is not reasonable to assume that the Garrison, single session encryption key would be modified only to encrypt and that the receiving software application would be capable of processing incoming data in all conceivable encrypted formats. Such a modification would render the Garrison encryption key incapable of performing the session specific encrypt/decrypt function for which it was originally designed.

Therefore, after Garrison encrypts and before the remote office transmits the data to the main office, the data still must be correctly formatted at the remote location to be compatible with the single permissible format used by the main office for the data transfer of that type. It would be futile to merely encrypt and decrypt data without also including a means to reformat the underlying data as well. Therefore, Garrison does not teach that the data is first automatically correctly formatted to be compatible with the single permissible format used by the main office for the data transfer of that type.

On the other hand, if the Office Action is asserting that instead of an encryption key, the manual remote formatting described in Williams and the automatic sending of the encryption key of Garrison would suggest to one of ordinary skill in the art that a formatting standard rule for the data transfer of that type can be automatically sent to the remote office by the main office in response to the initiation of contact by the remote office and before the remote office transmits the data to the main office such that the data is first automatically correctly formatted to be compatible with the single permissible format used by the main office for the data transfer of that type, such an assertion would require a significant leap of logic and without a written reference would be the result of an impermissible application of hindsight. MPEP 2145. Applicants respectfully submit

that the Examiner's assertion of such a combination results solely from knowledge gleaned from the applicant's application itself.

Further, Garrison does not address the formatting problem at hand. The Garrison disclosure would not provide one of ordinary skill in the art a reasonable expectation of success in solving the reformatting problem because the use of a Garrison data session specific encryption key, without significant modification would not alleviate the need for a single permissible formatting standard rule used for data transfers of that type.

For at least the above reasons, the combination of Williams, Beach and Garrison fail to teach or suggest all of the elements of amended claim 1 and amended independent claim 1 therefore is allowable over the cited combination of Williams, Beach and Garrison. Dependent claims 2-9 depend from allowable base claim 1 and are also allowable for at least the same reasons. Additionally, one or more of these dependent claims recite additional features that are patentable over the cited references, such as claim 9 which introduces multiple remote offices.

Claims 10 and 19

The Office Action has rejected independent claims 10 and 19 by asserting that Williams discloses most of the claim elements but concedes that Williams fails to disclose a single permissible formatting standard rule used for data transfers of that type that is automatically sent to the remote office before sending data. As in the rejection in regards to amended independent claim 1, the Office Action proceeds by asserting that Garrison cures the deficiency of Williams.

Independent claims 10 and 19 recite similar subject matter not disclosed in Williams or Garrison. As a representative sample, independent claim 10 recites, in pertinent part,

"[a] system for managing a set of access rules, comprising… wherein the formatting standard rule for the data transfer of that type is automatically sent to the remote office by the main office in response to the initiation of contact by the remote office and before the remote office transmits the data to the main office such that the data is first automatically correctly formatted to be compatible with the single permissible format used by the main office for the data transfer of that type.".

For similar reasons discussed above in regards to amended independent claim 1, such recitations are contrary to the Office Action's cited subject matter in Williams, Garrison or their combination. Applicants assert that the suggestion of a combination of Williams and Garrison results from knowledge gleaned from the applicant's application itself and further assert that there is no motivation to combine Williams with Garrison. An inclusion of the encryption key teachings of Garrison would not provide one of ordinary skill in the art a reasonable expectation of success in solving the reformatting problem because the use of a data session specific encryption key would not alleviate the need for a single permissible formatting standard rule used for data transfers of that type.

For at least this reason and the same reasons discussed in regards to amended independent claim 1, independent claims 10 and 19 are allowable over the cited combination of Williams and Garrison. Dependent claims 11-18 and 19-26 depend from allowable base claims 10 or 19 and are also allowable for at least the same reasons.

Claims 27-30

Claims 27-30 stand rejected under 35 USC 103(a) as being unpatentable over Lipner in view of Garrison and Williams. Independent claim 27 contains recitations similar to those in dependent claims 1, 10 and 19. As a representative example, Independent claim 27 recites in pertinent part,

"[a] system for managing data… for each type of data transfer from the remote office to the main office there is an access rule or a data rule that comprises a single permissible formatting standard used by the main office for data transfers of that type, and wherein the formatting standards of the access rules and data rules are automatically sent to the remote office by the main office in response to the initiation of contact by the remote office and before the remote office transmits the data to the main office such that the data is first automatically correctly formatted to be compatible with the single permissible format used by the main office for the data transfer of that type."

The Office Action asserts that Lipner discloses most of the claim elements but concedes that Lipner fails to disclose a "main office retaining access rules and data rules and being in communication with at least one remote office, the access rule comprising a formatting standard rule, the formatting standard rule being sent to the remote office before data transmission, and a single permissible formatting standard rule used for data transfers of that type that is automatically sent to a remote office before sending data".

The Office Action then asserts that the combination of Williams and Garrison cures this deficiency of Lipner although the Office Action concedes that Williams fails to disclose this same subject matter in paragraphs 8 and 17.

In the Applicant's discussion above in regards to independent claims 1, 10 and 19, it was demonstrated that the combination of Garrison and Williams fails to disclose a single permissible formatting standard used by the main office for data transfers of that type, and wherein the formatting standards of the access rules and data rules are automatically sent to the remote office by the main office in response to the initiation of contact by the remote office and before the remote office transmits the data to the main office such that the data is first automatically correctly formatted to be compatible with the single permissible format used by the main office for the data transfer of that type.

Therefore, since Lipner has been conceded not to contain the subject matter and neither of Williams, Garrison or their combination discloses this subject matter asserted to them in curing the deficiencies of Lipner, then it follows that independent claim 27 contains elements not disclosed by the combination of Lipner, Williams and Garrison and is allowable over their combination for at least the same reasons as discussed above in regards to independent claims 1, 10 and 19. Dependent claims 28-30 depend from an allowable independent claim 27 and are allowable for at least the same reasons.

Claims 11-13, 15-18 and 20-26

The Office Action cites the combination of Williams and Garrison in further combinations with other references in rejecting dependent claims 11-13, 15-18 and 20-26 and 28-30, namely Keyser, Schaefer, Hamala, Lipner and Spencer. None of these references address the core deficiencies inherent in the combination of Williams in view of Garrison discussed above in relation to independent claims 10 or 19. As such, dependent claims 11-13, 15-18 and 20-26 that depend from either allowable claim 10 or 19 and are allowable for at least the same reasons.

Conclusion

Applicants assert that the application including claims 1-13 and 15-30 is now in condition for allowance. Applicants request reconsideration in view of the remarks above and further request that a Notice of Allowability be provided. Should the Examiner have any questions, please contact the undersigned.

No fees are believed due. However, please charge any additional fees or credit any overpayment to Deposit Account No. 50-3025.

Respectfully submitted,

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